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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,685	08/28/2003	Hirofumi Watanabe	Q76895	5665

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EXAMINER

MORROW, JASON S

ART UNIT PAPER NUMBER

3612

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/649,685	<b>Applicant(s)</b> WATANABE, HIROFUMI	
	<b>Examiner</b> Jason S. Morrow	<b>Art Unit</b> 3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because, although applicant submitted a formal drawing of Figure 6 in response to the Final Rejection of 11/28/05, the drawing does not include the corrections made in the informal drawing submitted 5/6/05. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Cleland et al. (US 2003/0030299).

Regarding claim 1, Cleland et al. disclose a door-opening/closing apparatus (28) for a vehicle, comprising: a body having an opening (14); a door (18) for closing the opening of the body; a driving unit (534) that drives the door (18) to close the door; a door movement detection unit (506,204) that detects a closing movement of the door and generates an movement detection output; and a judgment unit (502) that judges whether the door is attempted to be closed and generates a closing attempt output; and a motor control unit (502) that, in response to the movement detection output generated when the door movement detection unit (506) detects the closing movement of the door, and when the judgment unit judges that the door is attempted to be closed, controls the driving unit (534) to automatically close the door.

Regarding claim 2, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit (506) detects the movement of the door by monitoring an operation of the driving unit (paragraph 0135-Hall Effect Sensor).

Regarding claim 3, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit detects the movement of the door by detecting a rotation angle (paragraph 0117) of a hinge that supports the door.

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Regarding claim 4, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door movement detection unit (204) detects the movement of the door by detecting expansion and contraction of a damper (530) mounted between the body and the door.

Regarding claim 9, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door (18) is a back door (Fig. 1) that closes a tailgate formed on a rear portion of the body.

Regarding claim 10, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the door is a side door (paragraph 0046, line 8) that closes a side gate formed on a side portion of the body.

Re claim 21, Cleland et al. discloses a door switch (522) for switching between a closing command and an opening command depending upon a length of ON time of the switch to close or open the door. (If the portion 516 of the switch 522 is pressed, the ON time of that portion of the switch causes the door to open. If the portion 518 of the switch 522 is pressed, the ON time of that portion of the switch causes the door to close. Thus depending on the length of time each part of the switch is ON, zero v. some length of time, the door is either open or closed).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cleland et al in view of Pudney (US 2003/0216817).

Regarding claims 5-7, Cleland et al. disclose that the door opening system may include a plurality of inputs to judge that the door is requested to be opened or closed. Cleland et al. do not disclose a sensor that detects a human touch as one of the inputs. Pudney discloses that touch sensors (paragraph 0031 and paragraph 0032), both electrostatic and temperature, are well known as a method of providing user input to open or close a door. It would have been obvious to one of ordinary skill in the art to include a touch sensor, either electrostatic or temperature, as an input to the control system to request opening or closing of the door. The motivation would have been to allow the operator of the vehicle to open the vehicle by a simple touch when they cannot access their keys.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cleland et al in view of Flick (US 2003/0001728).

Regarding claim 8, Cleland et al. disclose the door-opening/closing apparatus according to claim 1, wherein the body includes sensor that determines if the vehicle is in motion before opening or closing the door (paragraph 0156). Cleland et al. do not disclose that this sensor is a vibration sensor. Flick discloses that vibration sensors are used to detect movement of the vehicle (paragraph 0002). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a vibration sensor to determine whether or not the vehicle is moving and therefore whether or not the door should be open or closed.

*Response to Arguments*

7. Applicant's arguments filed 3/1/06 have been fully considered but they are not persuasive.

Applicant argues with respect to the rejection of claim 1 in that there is no operation in response to a door movement detection unit and judgment unit to operate the drive unit to close the door. The examiner respectfully disagrees. In paragraph 0096, Cleland describes how when the door reaches a "hanging " position, the motor returns to full power as the arm rotates giving enough force to ensure that the latch of the door is pushed on the striker. Thus the driving unit that drives the door to close the door responds to a door movement detection unit that detects a closing movement of the door and generates an movement detection output (that output being that the door has reached the hanging position) and a judgment unit that judges whether the door is attempted to be closed (judges that the door reaches the hanging position) and generates a closing attempt output (the output being the instruction to the motor to return to full power) and a motor control unit that, in response to the movement detection output generated when the door movement detection unit detects the closing movement of the door, and when the judgment unit judges that the door is attempted to be closed, controls the driving unit (534) to automatically close the door (from the hanging position to the closed position). Applicant's claim is broad enough to encompass such a structure. Applicant argues that the claim requires the drive unit to close the door when (1) the door movement detection unit detects a movement of the door and (2) when the judgment unit judges that the door is attempted to be closed. In the case of Cleland, when the data from 506 detects that movement of the door is hung and the judgment unit judges that the door is being closed and has reached that hang point, it gives an instruction to the motor

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to close the door fully. Thus the limitations that applicant points to are met by the prior art used in the rejection above.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason S. Morrow whose telephone number is (571) 272-6663. The examiner can normally be reached on Monday-Friday, 8:00a.m.-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 16, 2006

Jason S. Morrow  
Primary Examiner  
Art Unit 3612

  
**JASON MORROW**  
**PRIMARY PATENT EXAMINER**

3/16/06